

REMARKS

In the Final Action dated September 16, 2005, claims 1-6 and 9-13 are pending and under consideration. Claim 13 is rejected under 35 U.S.C. §112, second paragraph, as allegedly indefinite. Claims 1-6 and 9-12 are rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement.

This Response addresses each of the Examiner's rejections. Applicant therefore respectfully submits that the present application is in condition for allowance, or at least in a better condition for appeal. Favorable consideration of all pending claims is therefore respectfully requested.

In respect to the rejection of claim 13 as indefinite, the Examiner contends that the amino acids of SEQ ID NO: 5 that are included in the recited fragment are unclear. Additionally, the Examiner contends that the term "sequence" is missing from the claim.

In response, Applicant respectfully submits that claim 13 has been canceled, rendering the rejection moot. In addition, claims 1 and 9 have been amended to define the *Caulobacter crescentus* S-layer protein as comprising the amino acid sequence set forth in SEQ ID NO: 5. Furthermore, claims 1 and 9 have been amended to delete the term "a signal sequence" to avoid confusion, because the recited fragment comprising the C-terminal 120 amino acids of SEQ ID NO: 5 inherently contains a secretion signal. It is respectfully submitted that the claims, as presently recited, are not indefinite. Withdrawal of the rejection under 35 U.S.C. §112, second paragraph, is respectfully requested.

Regarding the written description rejection under 35 U.S.C. §112, first paragraph, Applicant respectfully directs the Examiner's attention to presently amended independent claims

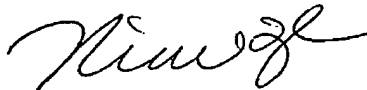
1 and 9. As amended, the first component of the fusion protein is essentially a fragment of SEQ ID NO: 5, which fragment includes at least the C-terminal 120 amino acids of SEQ ID NO: 2.

Applicant respectfully submits that the fragment, as presently recited, is characterized by its structure, i.e., containing at least the C-terminal 120 amino acids of the *C. crescentus* S-layer protein of SEQ ID NO: 5. Additionally, in view of the instant disclosure, it is clear that the C-terminal 120 amino acids of the *C. crescentus* S-layer protein of SEQ ID NO: 5 includes a secretion signal – i.e., the function of the recited fragment is adequately described in the specification. Furthermore, four specific examples of such fragment are disclosed in the specification, i.e., amino acids 622-1026, 690-1026, 784-1026, 892-1026 and 907-1026 of SEQ ID NO: 5.

It is therefore respectfully submitted that the subject matter of claims 1-6 and 9-12, as presently amended, is adequately described in the specification. The written description rejection of these claims under 35 U.S.C. §112, first paragraph, is overcome. Withdrawal of the rejection is respectfully requested.

In view of the foregoing amendments and remarks, it is firmly believed that the subject application is in condition for allowance, which action is earnestly solicited.

Respectfully submitted,



Xiaochun Zhu
Registration No. 56,311

SCULLY, SCOTT, MURPHY & PRESSER, P. C.
400 Garden City Plaza-STE 300
Garden City, New York 11530
(516) 742-4343
XZ:ab